

**REMARKS**

This is in full and timely response to the Office Action mailed on July 2, 2007.

Because September 2, 2007, the first extended month after the mailing date of the Office Action, falls on a Sunday and September 3, 2007 is Federal holiday in the District of Columbia, the time period for response is extended to September 4, 2007, which is the next day that is neither a Saturday, Sunday nor a Federal holiday in the District of Columbia.

Claims 1-3, 17-18, 21-22, 24-26, 28-30, and 33-34 are currently present in the above-identified application, with claims 1, 17, 24 and 29 being independent.

*No new matter has been added.*

Reexamination in light of the following remarks is respectfully requested.

**Rejection under 35 U.S.C. §112, second paragraph**

Paragraph 3 of the Office Action indicates a rejection of claims 1-3, 17-18, 21-22, 24-26, 28-30, and 33-34 under 35 U.S.C. §112, second paragraph.

This rejection is traversed at least for the following reasons.

The Office Action asserts that claimed features are relative and that the specification fails to provide a clear understanding as to the structure resulting from these product-by-process limitations (Office Action at page 2).

In particular, the Office Action at page 2 includes a contention that:

The instant claims recite that the compressed layer is obtained by compressing a layer containing the functional fine particles that is formed by application onto the

support with a compression force of at least  $44 \text{ N/mm}^2$  together with the support at a temperature below a glass transition temperature of said support, wherein the Applicant has stated on the record that these process claims allegedly produce a product different from the prior art. However, the Examiner notes that the limitations are relative and that the specification fails to provide a clear understanding as to the structure resulting from these product-by-process limitations. It is noted that the claimed compression step is stated in the specification as resulting in the particles being “buried” in the support (Page 25, lines 3-15) however the glass transition temperature limitation is stated as a temperature at which the support is not deformed (page 29, lines 20-24). Hence, it is unclear how the particles can be “buried” in the support if the support does not deform

Moreover, the Office Action at page 3 contends that:

Further, given that the limitation broadly recites any temperature below the glass transition temperature of the support, the Examiner notes that a temperature much lower than the  $T_g$  could in effect result in a plastic support that would be so firm or stiff as to resist any penetration or burying of the particles into the support. Hence, considering the instant claims do not recite that the particles are or are not embedded into the support, and considering the two limitations appear to contradict one another based on the guidance provided in the specification with regards to these two limitations, one having ordinary skill in the art would not be reasonably apprised of the scope of the claimed invention and could not interpret the metes and bounds of the claim so as to understand how to avoid infringement.

In response, contrary to the position set forth within the Office Action, it is respectfully believed that the compression step limitation and the glass transition temperature limitation never contradict one another and therefore the compression step produces the functional film of the independent claim 1 or the conductive film of the independent claims 17, 24 and 29 with a structural difference from Nakamura’s film. More detailed explanation will be described as follows.

The Office Action appears to confuse “deform” by temperature over the glass transition temperature and “buried” by compression.

The glass transition temperature (T<sub>g</sub>) is well known to one skilled in the art. From the common general knowledge, it is not meant that the temperature below T<sub>g</sub> cannot allow any change in the resin film’s form.

In the present invention, the compression can surely make the fine particles buried in the resin support at the temperature below T<sub>g</sub>.

Further, for example, it is well-known that the PET film (T<sub>g</sub>: 110°C) can easily change its form (for example which results in a dent) when the external force is added thereto at the temperature below T<sub>g</sub>. Namely, this also proves the fact that the compression step limitation and the glass transition temperature limitation never contradict one another, and the fact is easily recognized by the common general knowledge.

### **Rejection under 35 U.S.C. §102**

Paragraph 5 of the Office Action indicates a rejection of claims 1-3, 17-18, 21-22, 24-26, 28-30, and 33-34 under 35 U.S.C. §102 as allegedly being anticipated by U.S. Patent No. 6,383,559 to Nakamura et al. (Nakamura).

This rejection is traversed at least for the following reasons.

Nakamura discloses an anti-reflection film having a low refractive index layer which comprises a polymer binder and micro particles so that the micro particles are deposited to form micro voids surrounded by the micro particles (Abstract).

However, Nakamura fails to disclose, teach or suggest the compressed layer obtained by compression step.

On the other hand, the functional film of the present invention claimed in claims 1-3 and the conductive film of the present invention claimed in claims 17-18, 21-22, 24-26, 28-30, and 33-34 essentially comprise the compressed layer of fine particles that is obtained by compressing a layer containing the fine particles formed on the support together with the support.

As described in the above item 2-1, the *compression step produces the functional film or the conductive film with a structural difference from Nakamura's film*. Further, in the present invention, the fine particles are partly buried in the support by compression step, resulting in the functional film or conductive film which is excellent in close adhesion between the layer of the fine particles and the support. The excellent result is actually shown in the Table 1 and 2 about the 90 peel test in Example of the present specification.

Therefore, the present invention would not be anticipated by Nakamura.

In addition to the above, Nakamura fails to disclose, teach, or suggest the step of impregnating with a transparent substance.

On the other hand, in the transparent conductive film of the present invention claimed in claims 24-26 and 28, the conductive compressed layer is obtained by compressing the layer comprising conductive fine particles formed on the support together with the support, and then being impregnated with a transparent substance after compression.

Therefore, as described in the present specification (page 35, lines 9-15), "By impregnating the compressed layer with a transparent substance, the scattering of light can be reduced. The electric resistance of the obtained conductive film remains low since the voids in the compressed layer is impregnated with a transparent substance after the compressed layer of the conductive fine particles having a low electric resistance is formed".

Allowance of the claims is respectfully requested.

### **Conclusion**

For the foregoing reasons, all the claims now pending in the present application are allowable, and the present application is in condition for allowance.

Therefore, this response is believed to be a complete response to the Office Action.

Applicants reserve the right to set forth further arguments supporting the patentability of their claims, including the separate patentability of the dependent claims not explicitly addressed herein, in future papers.

There is no concession as to the veracity of Official Notice, if taken in any Office Action. An affidavit or document should be provided in support of any Official Notice taken. 37 CFR 1.104(d)(2), MPEP § 2144.03. See also, *Ex parte Natale*, 11 USPQ2d 1222, 1227-1228 (Bd. Pat. App. & Int. 1989)(failure to provide any objective evidence to support the challenged use of Official Notice constitutes clear and reversible error).

Accordingly, favorable reexamination and reconsideration of the application in light of the remarks is courteously solicited.

### **Extensions of time**

Please treat any concurrent or future reply, requiring a petition for an extension of time under 37 C.F.R. §1.136, as incorporating a petition for extension of time for the appropriate length of time.

**Fees**

If any fee is required or any overpayment made, the Commissioner is hereby authorized to charge the fee or credit the overpayment to Deposit Account # 18-0013.

If the Examiner has any comments or suggestions that could place this application in even better form, the Examiner is requested to telephone Brian K. Dutton, Reg. No. 47,255, at 202-955-8753.

Dated: September 4, 2007

Respectfully submitted,

By 

Lee Cheng

Registration No.: 40,949

Brian K. Dutton

Registration No.: 47,255

RADER, FISHMAN & GRAUER PLLC

Correspondence Customer Number: 23353

Attorneys for Applicant